

Atty Dkt. No.: L110-015
USSN: 09/844,929AMENDMENTSIn the claims:

Please cancel claims 1, 5 and 6, amend claims 2-4, 8-9, 11, 13-17, 21, 24 and 27, and add new claims 28-38.

Please cancel claim 1.

2. (Currently Amended) The electrochemical test strip according to Claim ~~28~~¹, wherein said test strip comprises from 2 to 25 reaction zones.

3. (Currently Amended) The electrochemical test strip according to Claim ~~28~~¹, wherein each of said reaction zones houses the same reagent composition.

4. (Currently Amended) The electrochemical test strip according to Claim ~~28~~¹, wherein at least two of said reaction zones house different reagent compositions.

Please cancel claim 5.

Please cancel claim 6.

7. Previously Cancelled

8. (Currently Amended) The electrochemical test strip according to Claim ~~27~~¹¹, wherein said redox reagent system comprises at least one enzyme and a mediator.

9. (Original) The electrochemical test strip according to Claim ~~8~~¹², wherein said at least one enzyme includes an oxidizing enzyme.

10. (Original) The electrochemical test strip according to Claim ~~9~~¹³, wherein said oxidizing

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enzyme in a glucose oxidizing enzyme.

5 11. (Currently Amended) The electrochemical test strip according to Claim 28-4, wherein at least one of said electrodes comprises a material selected from the group consisting of: gold, palladium, silver, iridium, carbon, platinum, nichrome, doped indium tin oxide and stainless steel.

6 12. (Original) The electrochemical test strip according to Claim 5, wherein said electrode comprises gold or palladium.

7 13. (Currently Amended) The electrochemical test strip according to Claim 28-4, wherein each of said reaction zones has a volume ranging from about 0.1 to 10 μ l.

C *1* *Contd* 14. (Currently Amended) The electrochemical test strip according to Claim 28-4, wherein said reference electrode is a gold electrode.

9 15. (Currently Amended) The electrochemical test strip according to Claim 28-4, wherein said working electrode is a palladium electrode.

10 16. (Currently Amended) The electrochemical test strip according to Claim 28-4, wherein said strip is present in a meter.

15 17. (Currently Amended) A method of determining the concentration of an analyte in a physiological sample, said method comprising:

(a) applying said physiological sample to an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reaction zones are provided by a bore through said spacer layer and further wherein each of said reaction zones has its own fluid ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip;

(b) detecting an electrical signal in said reaction zone using said opposing electrodes; and

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(b) relating said detected electrical signal to the amount of said analyte in said sample.

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18. (Original) The method according to Claim 17, wherein said analyte is glucose.

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19. (Original) The method according to Claim 18, wherein said redox reagent system comprises a glucose oxidizing enzyme.

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20. (Original) The method according to Claim 17, wherein said method comprises employing a meter.

C
Contd

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21. (Currently Amended) A kit for use in determining the concentration of an analyte in a physiological sample, said kit comprising:

(a) an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reaction zones are provided by a bore through said spacer layer and further wherein each of said reaction zones has its own fluid ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) at least one of:

- (i) a means for obtaining said physiological sample; and
- (ii) an analyte standard.

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22. (Previously Amended) The kit according to Claim 21, wherein said means for obtaining said physiological sample is a lancet.

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23. (Previously Amended) The kit according to Claim 21, wherein said kit further comprises a meter.

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24. (Currently Amended) A system for use in determining the concentration of an analyte in a physiological sample, said system comprising:

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(a) an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reaction zones are provided by a bore through said spacer layer and further wherein each of said reaction zones has its own fluid ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) a meter.

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25. (Previously Amended) The system according to Claim *24*, wherein said system further comprises a means for obtaining said physiological sample.

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26. (Previously Amended) The system according to Claim *24*, wherein said system further comprises an analyte standard.

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27. (Previously Reinstated) The electrochemical test strip according to claim *24*, wherein at least one of said reagent compositions is a redox reagent system.

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28. (Newly Added) An electrochemical test strip comprising:

(a) a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer, wherein each of said reaction zones is defined by a bore through said spacer layer and further wherein each of said reaction zones has its own fluid ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) a reagent composition present in each of said reaction zones.

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29. (Newly Added) An electrochemical test strip comprising:

(a) a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer, wherein each of said reaction zones is defined by a bore through said spacer layer and further wherein at least two of said reaction zones have fluid ingress channels that

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merge to produce a single ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) a reagent composition present in each of said reaction zones.

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30. (Newly Added) The electrochemical test strip according to Claim *29*, wherein said test strip comprises from 2 to 25 reaction zones.

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31. (Newly Added) The electrochemical test strip according to Claim *29*, wherein each of said reaction zones houses the same reagent composition.

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32. (Newly Added) The electrochemical test strip according to Claim *29*, wherein at least two of said reaction zones house different reagent compositions.

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33. (Newly Added) The electrochemical test strip according to claim *29*, wherein at least one of said reagent compositions is a redox reagent system.

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34. (Newly Added) The electrochemical test strip according to Claim *33*, wherein said at least one enzyme includes an oxidizing enzyme.

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35. (Newly Added) The electrochemical test strip according to Claim *34*, wherein said oxidizing enzyme is a glucose oxidizing enzyme.

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36. (Newly Added) A method of determining the concentration of an analyte in a physiological sample, said method comprising:

(a) applying said physiological sample to an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reaction zones are provided by a bore through said spacer layer and further wherein at least two of said reaction zones have fluid ingress channels that merge to produce a single ingress channel to provide for fluid communication between said reaction zones and the external environment of said

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test strip;

- (b) detecting an electrical signal in said reaction zone using said opposing electrodes; and
- (c) relating said detected electrical signal to the amount of said analyte in said sample.

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37. (Newly Added) A kit for use in determining the concentration of an analyte in a physiological sample, said kit comprising:

(a) an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reaction zones are provided by a bore through said spacer layer and further wherein at least two of said reaction zones have fluid ingress channels that merge to produce a single ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) at least one of:

- (i) a means for obtaining said physiological sample; and
- (ii) an analyte standard.

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38. (Newly Added) A system for use in determining the concentration of an analyte in a physiological sample, said system comprising:

(a) an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reaction zones are provided by a bore through said spacer layer and further wherein at least two of said reaction zones have fluid ingress channels that merge to produce a single ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) a meter.